

Applicant: Bertram SUGG  
Docket No. R.306628  
Preliminary Amdt.

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1-5. (Canceled)

6. (New) In a piezoelectric actuator, comprising

a multilayered structure of piezoelectric layers, having a piezoelectrically active region, with internal electrodes that are situated between the layers and can be acted on with an electrical voltage, and having

inactive regions without internal electrodes in the top part and bottom part of the piezoelectric actuator, the improvement wherein

the dielectric constant of at least the top part or bottom part, as an inactive region, is less than the dielectric constant of the active region.

7. (New) The piezoelectric actuator according to claim 6, wherein

the inactive regions and the active region are manufactured out of the same ceramic base substance and an additional doping agent is added to the inactive regions to minimize the dielectric constant.

Applicant: Bertram SUGG  
Docket No. R.306628  
Preliminary Amdt.

8. (New) The piezoelectric actuator according to claim 7, wherein  
the base substance is lead zirconate titanate and the doping agent is silver.
9. (New) The piezoelectric actuator according to claim 6, wherein  
the layer thicknesses of the inactive regions are the same.
10. (New) The piezoelectric actuator according to claim 7, wherein  
the layer thicknesses of the inactive regions are the same.
11. (New) The piezoelectric actuator according to claim 8, wherein  
the layer thicknesses of the inactive regions are the same.
12. (New) The piezoelectric actuator according to claim 6, wherein  
the inactive regions are composed of an electrically polarized ceramic with an  
electrical field applied to it so as to minimize the dielectric constant.
13. (New) The piezoelectric actuator according to claim 7, wherein  
the inactive regions are composed of an electrically polarized ceramic with an  
electrical field applied to it so as to minimize the dielectric constant.

Applicant: Bertram SUGG  
Docket No. R.306628  
Preliminary Amdt.

14. (New) The piezoelectric actuator according to claim 8, wherein

the inactive regions are composed of an electrically polarized ceramic with an electrical field applied to it so as to minimize the dielectric constant.

15. (New) The piezoelectric actuator according to claim 9, wherein

the inactive regions are composed of an electrically polarized ceramic with an electrical field applied to it so as to minimize the dielectric constant.

16. (New) The piezoelectric actuator according to claim 10, wherein

the inactive regions are composed of an electrically polarized ceramic with an electrical field applied to it so as to minimize the dielectric constant.

17. (New) The piezoelectric actuator according to claim 11, wherein

the inactive regions are composed of an electrically polarized ceramic with an electrical field applied to it so as to minimize the dielectric constant.